6160 Fairmount Avenue • Suite A • San Diego, California 92120 • (619) 299-0033 • Fax (619) 299-0087

July 12, 2005 Project 3100029

Mr. Al Apuzzo Gem Properties c/o O'Bryan-Smith Investments 402 West Broadway, Suite 2900 San Diego, California 92101

RE: June 2005 Groundwater Monitoring Report 2702-2732 Lytton Street and 3000-3006 Barnett Avenue San Diego, California

Dear Mr. Apuzzo:

Groundwater & Environmental Services (GES) is pleased to provide Gem Properties (Client) with this report of groundwater monitoring activities performed at the subject site located at 2702-2732 Lytton Street and 3000-3006 Barnett Avenue in San Diego, California (Figure 1). On April 22, 2005, GES purchased essentially all assets of EnecoTech, Inc. (EnecoTech).

#### BACKGROUND

GES understands that the Matchinski Family has owned the property since approximately the 1930s. The subject site consists of a developed strip of land along Lytton Street and Barnett Avenue. The site is bound by an alley and commercially developed property to the east, commercial property at 2790 Lytton to the west, residential development and a church facility to the north, and Lytton Street and a Naval facility to the south. The site is developed with a commercial building occupied by three commercial tenants. Current site uses include Just Curves (a clothing store), Empty Tomb Choppers (a motorcycle fabrication shop), and Pacific Embroidery (a garment shop). According to a Phase I report provided by the Client, one of the previous site uses was a gasoline station from approximately 1938 to 1957. However, information provided by the Client suggests that a portion of the original gas station lot may not be within the current property dimensions, as part of the property where the station existed was lost due to the widening and realignment of the adjacent Lytton Street and Barnett Avenue.

On July 8, 2003, and September 10, 2003, EnecoTech performed site assessment activities at the subject site. These activities included the placement of fourteen soil borings and the collection of soil and groundwater samples to assess subsurface conditions. Hydrocarbon impact was detected in soil and groundwater samples collected. Soil impact was greatest in the soil boring located inside the building now occupied by Empty Tomb Choppers, and groundwater impact was greatest in the soil boring located in the parking area northwest of the existing building. Based upon the data collected, impact to soil was delineated. Individual reports of these site assessment activities were submitted to the Client on August 15, 2003, and September 24, 2003.

Under an approved work plan, EnecoTech performed a Phase II Environmental Site Assessment (Phase II ESA). EnecoTech proposed to perform a geophysical survey in an attempt to locate the underground storage tanks (USTs) or former tank pit, the likely source of hydrocarbon impact at the site. EnecoTech contracted ULS Services Corporation (ULS) to conduct the geophysical survey, which was performed on May 7, 2004. The results of the survey identified two anomalies located west of the clothing store and motorcycle fabrication shop. ULS provided EnecoTech a report of field activities.



EnecoTech mobilized to the subject site on May 25, 2004, to perform exploratory soil borings to assess whether the anomalies identified during the geophysical survey were components of a former fueling system (USTs or product piping). EnecoTech staff performed eight exploratory borings with a hand auger to depths ranging from 2 feet to 7.5 feet below ground surface (bgs) however; no indication of a tank or product piping was encountered in the soil borings.

On July 7, 2004, EnecoTech installed four monitoring wells in an attempt to assess groundwater impact. The four wells were surveyed and sampled on July 12, 2004. The results of soil and groundwater samples confirmed the findings of the previous investigation performed by EnecoTech. Soil and groundwater impact appear to be limited to an area beneath the western edge of the onsite buildings and west of the buildings. A Comprehensive Site Assessment report dated September 10, 2004, was submitted to the County of San Diego, Site Assessment and Mitigation Division (SAM) detailing the results of the Phase II ESA.

In a letter dated September 28, 2004, SAM requested that a work plan be submitted for the installation of an additional monitoring well south of the subject site to further assess soil and groundwater impact. EnecoTech submitted a work plan, which was approved in a letter from SAM dated December 17, 2004.

On March 7, 2005, once an encroachment permit had been obtained, EnecoTech installed one additional monitoring well to further assess soil and groundwater impact. The five monitoring wells were sampled on March 11, 2005. An Additional Site Assessment report dated April 20, 2005, was submitted to SAM detailing the results of the well installation.

## GAUGING, PURGING, AND SAMPLING

On June 23, 2005, GES staff gauged, purged, and sampled the five groundwater monitoring wells according to GES standard field procedures included in Appendix A of this report. The monitoring wells were gauged for groundwater elevation and the presence of free product. Free product was not encountered in any wells. After gauging, the wells were purged using either a 12-volt submersible pump or a disposable bailer. While purging each well, GES staff collected temperature, conductivity, and pH readings at pre-determined intervals. Prior to sampling, groundwater was allowed to recharge to greater than 80% of static elevation. Following recharge, samples were retrieved from each well using disposable bailers, collected in the appropriate analysis-specific sample containers, and stored in an ice chest until delivered to a California State-certified laboratory under chain-of-custody protocol.

Cross-contamination between monitoring wells was avoided by taking a number of precautions. After gauging each well, the water-level probe was decontaminated; the cleanest monitoring wells were purged and sampled first, followed by increasingly impacted wells; purging equipment was decontaminated with an Alconox solution followed by a clean water rinse; and, groundwater samples were collected using disposable bailers and new gloves.

Approximately 53 gallons of purge water collected and stored during this event were transferred into a 55-gallon Department of Transportation (DOT)-approved drums onsite. Gauging, purging, and well condition forms are provided in Appendix A.

#### **GROUNDWATER ELEVATIONS**

EnecoTech previously contracted Southern California Survey to locate the five monitoring wells for elevation latitude and longitude according to guidelines established under Assembly Bill 2886 (AB2886). AB2886 requires that laboratory and geographical data associated with leaking UST (LUST) cases be submitted to the State of California-maintained database (GeoTracker). Elevation data used to calculate groundwater elevations and create the groundwater elevation contour map is presented on Figure 2. The monitoring well survey, gauging, and laboratory data have been submitted to the GeoTracker website. Confirmation of the data submittal to GeoTracker is presented in Appendix B.



To assess the potential influence of tidal action on groundwater at the site, GES performed the gauging event during the lowest minus low tide event in June. The monitoring wells were gauged for groundwater elevations at a -1.7 (low) tide. During the two previous sampling events, groundwater was gauged for elevation during high tide, and groundwater was found to flow away from the San Diego Bay in an unexpected (onshore) direction.

GES found that groundwater elevations decreased by 0.23 feet in MW1, 0.17 feet in MW3, 0.17 feet in MW4, and 0.32 feet in MW-5, and groundwater elevation increased by 0.81 feet in MW-2 compared with data from the most recent sampling event of March 11, 2005. Groundwater during the low tide gauging event was found to flow south across the northern portions of the site and south-southwest across the central portions of the site in a southward (off-shore) gradient. This change of groundwater flow direction at the opposite tidal condition indicates the groundwater at the site is tidally influenced. This would tend to cause groundwater elevations and gradient to change frequently over time based on the timing and magnitude of tidal forces. Groundwater conditions at this site may also be influenced by the sewer line that runs west of the site, the water line that runs south of the site, and the tidal storm drain that runs through the site. Cumulative groundwater elevation data is presented in Table 1.

## IMPACTED GROUNDWATER

Groundwater samples were analyzed at a California State-certified laboratory for total petroleum hydrocarbon as diesel (TPHd) by EPA Method 8015m and TPH as gasoline (TPHg), and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8015B/8021B. The samples were also analyzed by EPA Method 8260B for fuel oxygenates methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), and tert-butanol (TBA). The laboratory report is provided in Appendix C and analytical reports are summarized in Tables 2 and 3. TPHd, TPHg, benzene, and MTBE concentrations are presented on Figure 3.

None of the groundwater samples collected contained detectable concentrations of TPHd at <0.50 mg/l. TPHg was detected in groundwater monitoring wells MW1 at 64  $\mu$ g/l, MW3 at 110  $\mu$ g/l, and MW5 at 450  $\mu$ g/l. Groundwater samples collected from MW2 and MW4 were non-detect for TPHg. These results indicate a decrease in TPHg concentrations in all wells with the exception of MW4, which has always exhibited non-detect results.

Benzene was detected in monitoring wells MW1 at  $0.71~\mu g/l$  and in MW5 at  $0.51~\mu g/l$ . Benzene concentrations decreased in all wells with the exception of MW4 which has always exhibited non-detect results.

The fuel oxygenates DIPE, ETBE, TAME, MTBE, and TBA were not detected at the respective laboratory detection limits in any of the monitoring wells sampled during this event.

## BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME

SAM requested that GES graph benzene and MTBE concentrations, as well as groundwater elevation versus time to support the GES conclusion that the impact plume is stable and decreasing. GES graphed benzene concentrations versus groundwater elevation over time for each monitoring well. MTBE has not been detected in any groundwater samples collected at the site; therefore MBTE concentrations were not graphed. Concentrations of benzene have decreased to <0.30  $\mu$ g/l in MW2, MW3, and MW4 during the June 2005 sampling event. Benzene concentrations have also decreased from 7.4  $\mu$ g/l to 0.71  $\mu$ g/l in MW1 and from 5.4  $\mu$ g/l to 0.51  $\mu$ g/l in MW5. Based upon the variation of benzene concentrations with groundwater elevations, there appears to be no relationship between groundwater elevation and benzene concentrations. This is not an unexpected result for this site, due to the fact that groundwater elevation may fluctuate on a daily basis due to tidal influence. Graphs are presented in Appendix D.



#### SUMMARY

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TPHd remained below the laboratory detection limit in all monitoring wells sampled. TPHg was detected in monitoring well MW1 at 64  $\mu$ g/l, MW3 at 110  $\mu$ g/l, and MW5 at 450  $\mu$ g/l. TPHg concentrations decreased in all three wells compared to the previous monitoring event. TPHg decreased in MW2 from 130  $\mu$ g/l to <50  $\mu$ g/l. TPHg has been non-detect for MW4 during all three sampling events. BTEX constituents decreased in concentration when compared to data from the previous monitoring event. Fuel oxygenates were not detected in any of the monitoring wells.

Based on the groundwater elevation data collected on June 23, 2005, groundwater appears to flow to the south-southwest toward the San Diego Bay during low tide events. The monitoring wells were gauged for groundwater elevations at a -1.7 (low) tide. During the two previous sampling events, groundwater was gauged for elevation during high tide, and groundwater was found to flow away from the San Diego Bay. Based upon available data, groundwater flow direction at the site appears to be influenced by tidal conditions. However, groundwater conditions at this site could also be influenced by the sewer line that runs west of the site, the water line that runs south of the site, and the tidal storm drain that runs through the site.

## RECOMMENDATIONS

The June 2005 monitoring event confirmed the low concentrations of TPHg and benzene in groundwater. It is the opinion of GES that the groundwater impact that exists onsite does not appear to pose a risk to public health or the environment. Therefore, no further action is necessary or should be required at this time. GES recommends properly abandoning the wells as part of the closure procedure.

GES appreciates the opportunity to provide consulting services to Gem Properties. We look forward to being of continued service. If you have any questions or concerns regarding this report, please contact the undersigned at (619) 299-0033 at your convenience.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Casey Poldino

Staff Environmental Scientist

John Royal, PG #6757

Principal Hydrogeologist

Attachments:

Figures 1, 2, and 3

Tables 1, 2, and 3

Appendices A, B, C, and D

cc:

Mr. Danny Martinez - County of San Diego DEH

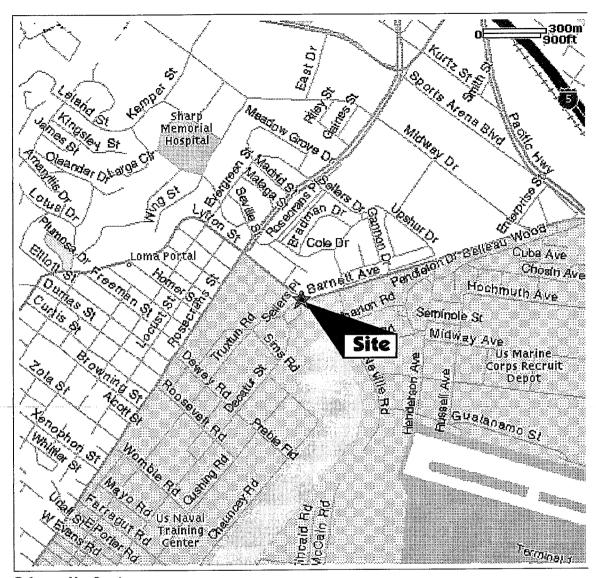
# **FIGURES**

**FIGURE 1:** Site Location Map

FIGURE 2: Groundwater Elevation Map (6-23-05)

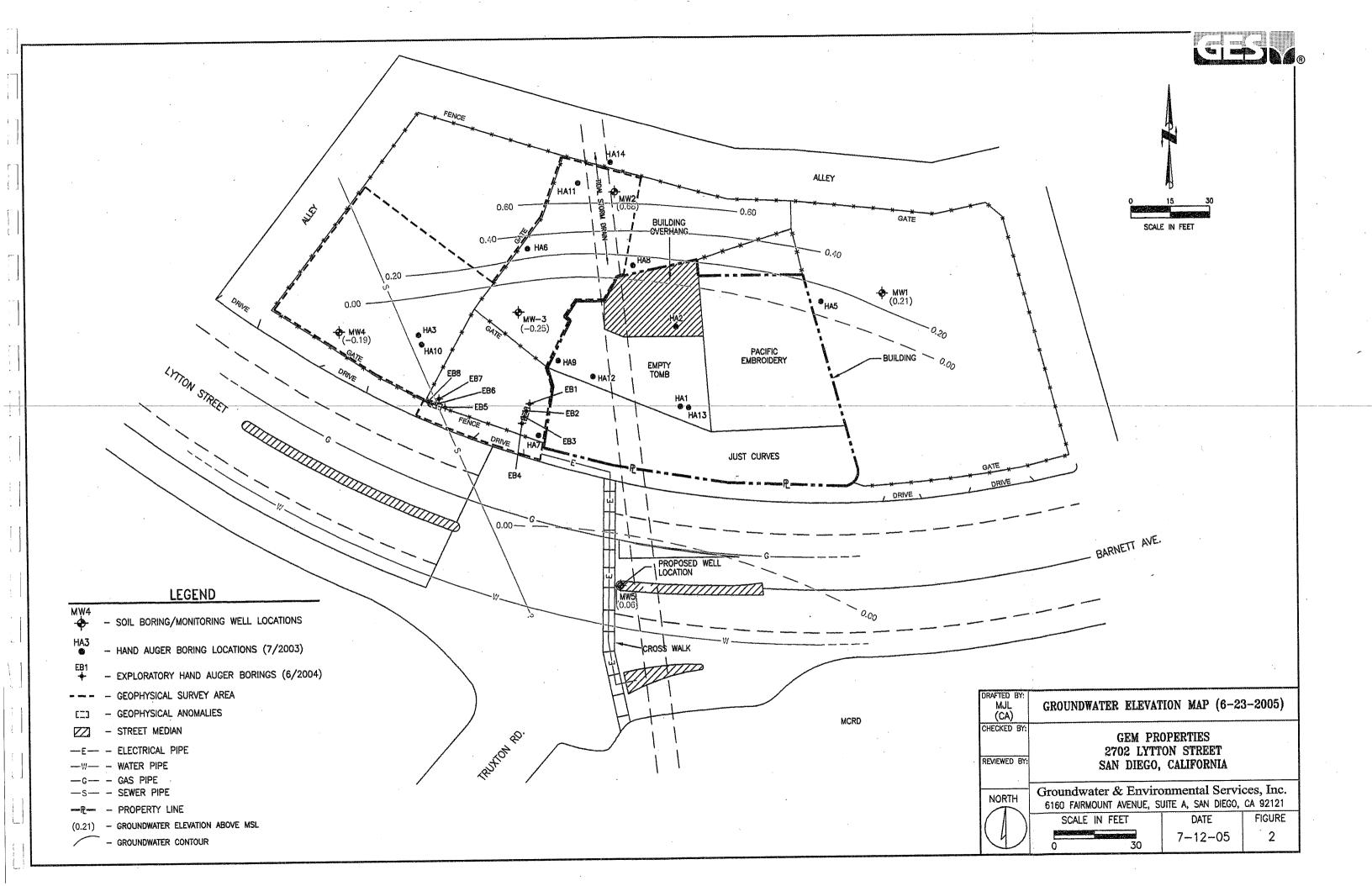
FIGURE 3: TPHg, TPHd, Benzene & MTBE in Groundwater (6-2005)

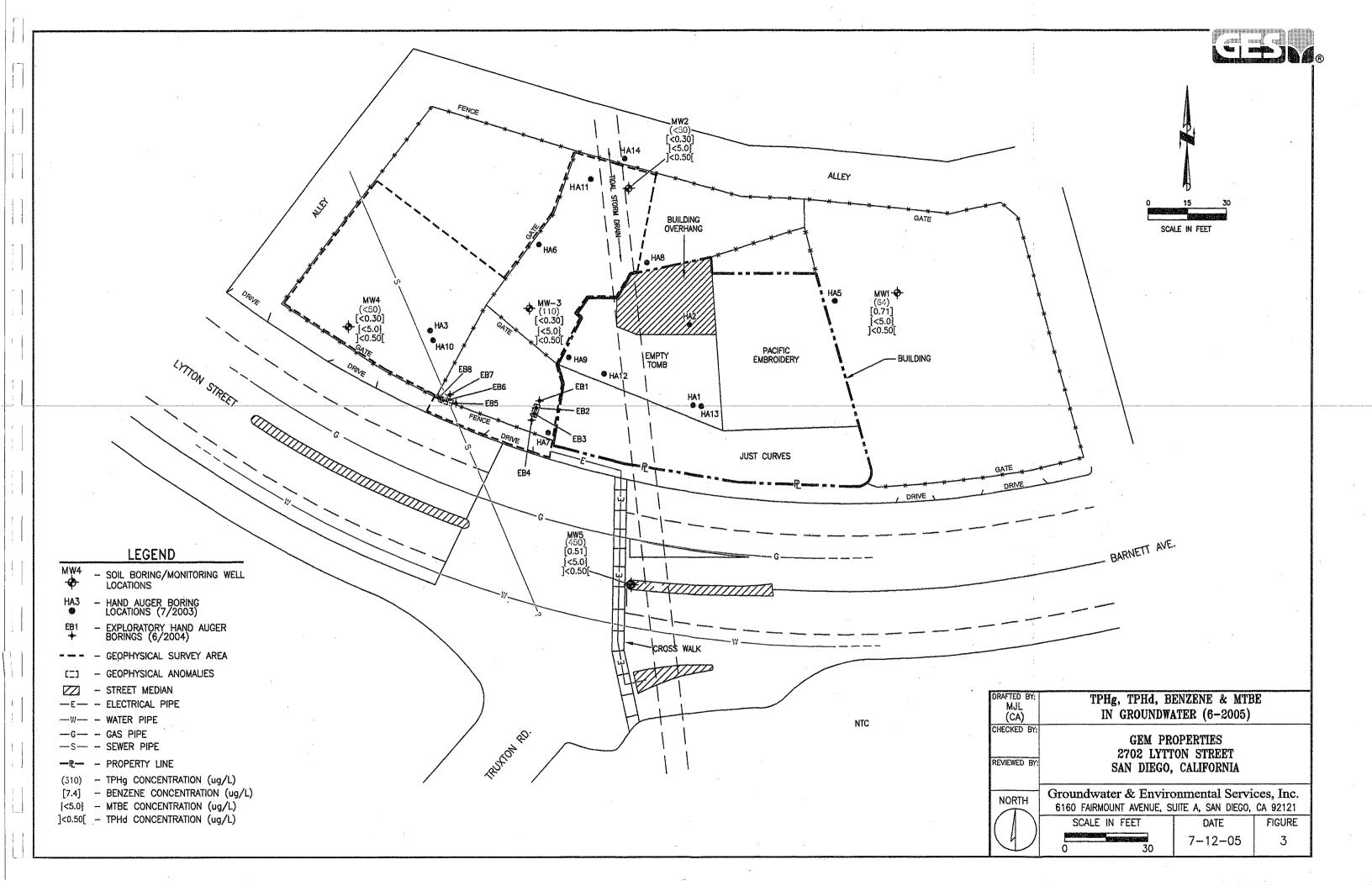




Reference Map Quest.

DRAFTED BY: MJL (CA)	SITE LOCA	ATION MAP	
CHECKED BY:	2702 LYTT	OPERTIES ON STREET CALIFORNIA	
NORTH	Groundwater & Environment Groundwater & Envi		
	AS SHOWN	DATE 7-12-05	FIGURE 1





# **TABLES**

**TABLE 1: Groundwater Elevation and Free Product Thickness** 

**TABLE 2: Laboratory Results - Groundwater** 

**TABLE 3:** Laboratory Results - Groundwater Fuel Oxygenates

**TABLE 1: Groundwater Elevation and Free Product Thickness** 

Well ID	Date Measured	Well Casing Elevation (feet msl) <sup>1</sup>	Depth to Groundwater (feet)	Groundwater Elevation <sup>2</sup> (feet msl)	Free Product Thickness (feet)
		,	, ,	,	, ,
MW1	7/12/04	8.90	8.94	-0.04	
	3/11/05		8.46	0.44	
	6/23/05		8.69	0.21	
MW2	7/12/04	9.25	9.77	-0.52	
	3/11/05	<b>7.2</b> 0	9.38	-0.13	
	6/23/05		8.57	0.68	
MW3	7/12/04	9.93	10.31	-0.38	
	3/11/05		10.01	-0.08	
	6/23/05		10.18	-0.25	
MW4	7/12/04	11.02	11.22	-0.20	
	3/11/05	11.02	11.04	-0.02	
	6/23/05		11.21	-0.19	
MW5	3/11/05	10.11	9.73	0.38	
111113	6/23/05	10.11	10.05	0.06	

**TABLE 2: Laboratory Results – Groundwater** 

		EPA Me	thod 8015		EI	PA 8021B	
	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes
Sample ID	Sampled	mg/l	μg/l	μg/l	μg/l	μg/l	μg/l
MW1	7/12/04	< 0.50	< 50	< 0.30	< 0.30	< 0.30	< 0.60
	3/11/05	< 0.50	310	7.4	26	13	83
	6/23/05	< 0.50	64	0.71	0.94	1.1	6.5
MW2	7/12/04	< 0.50	<50	< 0.30	< 0.30	< 0.30	< 0.60
111 11 2	3/11/05	< 0.50	130	3.9	13	<b>6.7</b>	32
	6/23/05	< 0.50	<50	< 0.30	< 0.30	< 0.30	< 0.60
	0/25/05	10.00		10.00	10.00	10.00	10100
MW3	7/12/04	1.2	2,900	35	8.8	26	22
	3/11/05	< 0.50	260	3.1	13	8.1	49
	6/23/05	< 0.50	110	< 0.30	< 0.30	< 0.30	0.66
MW4	7/12/04	< 0.50	<50	< 0.30	< 0.30	< 0.30	< 0.60
	3/11/05	< 0.50	< 50	< 0.30	< 0.30	< 0.30	< 0.60
	6/23/05	< 0.50	<50	< 0.30	< 0.30	< 0.30	< 0.60
MW5	3/11/05	<0.50	540	5.4	< 0.30	9.6	2.4
	6/23/05	< 0.50	450	0.51	< 0.30	2.4	1.5

TABLE 3: Laboratory Results – Groundwater Fuel Oxygenates (Results in  $\mu g/l$ )

Sample	Date		E	PA 8260B		
ID	Sampled	DIPE	ETBE	TAME	TBA	MTBE
MW1	7/12/04	< 5.0	< 5.0	< 5.0	<25	<1.0
	3/11/05	< 5.0	< 5.0	< 5.0	<25	< 5.0
	6/23/05	<5.0	<5.0	<5.0	<25	< 5.0
MW2	7/12/04	<5.0	<5.0	<5.0	<25	<1.0
1,1,1,2	3/11/05	<5.0	<5.0	<5.0	<25	<5.0
	6/23/05	< 5.0	< 5.0	< 5.0	<25	< 5.0
MW3	7/12/04	< 5.0	< 5.0	< 5.0	<25	<1.0
	3/11/05	< 5.0	< 5.0	< 5.0	<25	< 5.0
	6/23/05	<5.0	<5.0	<5.0	<25	<5.0
MW4	7/12/04	<5.0	<5.0	<5.0	<25	<1.0
171 77 -	3/11/05	<5.0 <5.0	<5.0	<5.0	<25	<5.0
	6/23/05	<5.0	<5.0	<5.0	<25	<5.0 <5.0
	0/23/03	₹3.0	₹3.0	₹3.0	<b>\25</b>	₹3.0
MW5	3/11/05	<5.0	<5.0	<5.0	< 50	< 5.0
	6/23/05	< 5.0	< 5.0	< 5.0	<25	< 5.0

# **APPENDIX A**

## **Standard Field Procedures**

# **Field Forms:**

- Monitoring Well Gauging Form Well Purging Form
- **Well Condition Form**

#### STANDARD FIELD PROCEDURES

## WELL GAUGING, PURGING, AND SAMPLING

Prior to purging and sampling, static groundwater levels in each monitoring well are measured using colorimetric water-sensing paste and a metal tape measure. Gasoline-sensing paste and a metal tape measure are used to detect and measure any free product.

Each well is then purged of at least one borehole volume of water (see calculations below) using a polyethylene bailer. Measurements of pH, temperature, and electrical conductivity are recorded and purging is continued in one-half borehole volume increments until pH, temperature, and electrical conductivity measurements are stable (i.e., within 10%).

Once purging is complete, the well is allowed to recover to within 80% of its static condition (or until two hours have passed). As soon as sufficient volume is available, groundwater samples are retrieved using a disposable bailer and collected in a minimum of three laboratory-provided Volatile Organic Analysis vials with a Teflon-lined septum. Sample containers are examined to assess that no headspace is present then stored in a chilled ice chest or refrigerated at 4° Celsius until transported to a state-certified laboratory for appropriate chemical analysis. Cross-contamination between wells is avoided by taking a number of precautions including purging and sampling wells in a specific sequence (cleanest to dirtiest), and using disposable or dedicated bailers, new gloves, and clean equipment for each well.

One borehole volume is calculated according to the formula in the current SAM Manual. The calculation assumes a filter pack porosity of 25%.

For a 8" diameter borehole containing a 2" diameter casing, one borehole volume (gal) = 0.776 x (WD-GW)

Where (WD-GW) is the well depth - depth to groundwater, i.e., the height (in feet) of the water column in the well.

Jo Jo	Date: 6 23 05	Corrected Groundwater Elevation (CGE) (ft above ms1)	7	**************************************	, tract of	2000	openenc:						
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IWEST, INC. Iging Form	§ Gauged by: CR	Groundwater Elevation (GE) (ft above msl)	0.06	-0.19	0.68	6.21	-6.25						
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ļģ	Projec	Depth to Water (feet)	10.05	1.21	5.57	8.69	10.19						
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Bold Column Headings = Minimum items to be en	Project No.: 2	Well ID	MW S	Z W Z	MW 2	3 5	N N 3			}			

\*Water level correction based on free product depressing water table.

Equation: Where:

GE + (FP X SG/SG<sub>w</sub>) = CGE GE = Measured Water Level FP = Free Product Thickness CGB = Corrected Water Level

Specific Gravities (unitless)

 $SG_{r}$  = free product = 0.8  $SG_{w}$  = water = 1.0  $SG_{r}/SG_{w}$  = 0.8

# ENECOTECH SOUTHWEST, INC. WELL PURGING FORM

Project Name:

Date:

GEN PRESTY

Project Number:

3100029

Personnel:

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Check the following during each visit:

<sup>. 7. %</sup> 

Clean gasket with brush. Spray with silicon (well cap on and covered with bag). Get water out of vault.
Spray lock with silicon. Spray bolt threads with silicon. Is locking top and lock number the same for entire site?

# APPENDIX B

**GeoTracker Data** 

Submittal Report Page 1 of 2

# **Electronic Submittal Information**

Main Menu | View/Add Facilities | Upload EDD | Check EDD

FORMER ADMIRAL SERVICE STATION - T06019702078\* DENOTES THAT A SUBMITTAL HAS BEEN AUTO-RECEIVED 2702 LYTTON ST SAN DIEGO, CA 92110

EDF SUBMIT	TALS				
CONF NUM	<u>TITLE</u>	QUARTER	SUBMITTED BY	SUBMIT DATE	<u>STATUS</u>
5019477427	GROUNDWATER SAMPLING EVENT	Q1 2005	EDWARD KONTOS	7/8/2005	RECEIVED ON 7/14/2005 VIEW QC SUBMITTAL REPORT
9137427330	GROUNDWATER SAMPLING EVENT	Q1 2005	EDWARD KONTOS	7/8/2005	RECEIVED ON 7/14/2005 VIEW OC REPORT
2373691201	GROUNDWATER MONITORING EVENT	Q2 2005	EDWARD KONTOS	7/8/2005	RECEIVED ON 7/14/2005 VIEW QC SUBMITTAL REPORT
2210696041	GROUNDWATER MONITORING EVENT	Q3 2004	EDWARD KONTOS	7/8/2005	RECEIVED VIEW QC REPORT

## GEO\_XY SUBMITTALS

NO GEO\_XY SUBMITTALS FOR THIS FACILITY.

CEO	7 QI	IRMIT	LLVIG
	Z .7U		IIALO

CONF NUM	TITLE	SUBMITTED BY	SUBMIT DATE	STATUS	
1994857609	GEO_Z	EDWARD KONTOS	7/8/2005	<b>RECEIVED ON 7/14/2005</b>	<b>VIEW SUBMITTAL</b>

GEO_WELL	SUBMITTALS				
CONF NUM	TITLE	SUBMITTED BY	<u>SUBMIT</u> DATE	<u>STATUS</u>	
7507542252	GAUGING DATA JULY 2004	EDWARD KONTOS	7/11/2005	RECEIVED ON 7/14/2005	<u>VIEW</u> SUBMITTAL
9875488102	GAUGING DATA MARCH 2005	EDWARD KONTOS	7/11/2005	RECEIVED ON 7/14/2005	<u>VIEW</u> SUBMITTAL
3804580509	GAUGING DATA JUNE 2005	EDWARD KONTOS	7/11/2005	RECEIVED ON 7/14/2005	<u>VIEW</u> SUBMITTAL

GEO_MAP	SUBMITTALS					
CONF NUM	<u>TITLE</u>	SUBMITTED BY	<u>SUBMIT</u> DATE	<u>STATUS</u>		
8885816276	6 GEO_MAP	EDWARD KONTOS	7/27/2005	PENDING	<u>VIEW</u> SUBMITTAL	DELETE SUBMITTAL

GEO_BORE SUBMITTALS										
CONF NUM	TITLE	SUBMITTED BY	<u>SUBMIT</u> DATE	<u>STATUS</u>						
9780652701	GEO_BORE	EDWARD KONTOS	7/27/2005	PENDING	VIEW SUBMITTAL	DELETE SUBMITTAL				

GEO_REPORT SUBMITTALS											
CONF NUM	<u>TITLE</u>	SUBMITTED BY	SUBMIT DATE STATUS								
3258756875	ADDITIONAL SITE ASSESSMENT REPORT	EDWARD KONTOS	7/27/2005 <b>PENDING</b> VIEW SUBMITTAL DELETE SUBMITTAL								

Submittal Report Page 2 of 2

NAME CHANGE SUBMITTALS	
NO NAME CHANGE SUBMITTALS FOR THIS FACILITY.	
DUPLICATE FACILITY SUBMITTALS	
NO DUPLICATE FACILITY SUBMITTALS FOR THIS FACILITY.	

Logged in as GES (AUTH\_RP)

 $CONTACT\ SITE\ \underline{ADMINISTRATOR}.$ 

# APPENDIX C

**Laboratory Report** 



## LABORATORY REPORT

Prepared For: Enecotech Southwest, Inc.-San Diego Project: Gem Properties/Lytton Street

3100029

6160 Fairmount Avenue, Suite A San Diego, CA 92120

Attention: Casey Poldino

Sampled: 06/23/05 Received: 06/24/05

Issued: 07/02/05 12:35

#### NELAP #01108CA California ELAP#1197 CSDLAC #10117

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

#### SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
IOF1810-01	MW5	Water
IOF1810-02	MW4	Water
IOF1810-03	MW2	Water
IOF1810-04	MW1	Water
IOF1810-05	MW3	Water

Reviewed By:

**Del Mar Analytical, Irvine** Heather Bean For Chris Roberts Project Manager

Leather of bean

Enecotech Southwest, Inc.-San Diego

6160 Fairmount Avenue, Suite A

San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810

Sampled: 06/23/05 Received: 06/24/05

## EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/8015 CADHS Modified)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1810-01 (MW5 - Water) Reporting Units: mg/l EFH (C8 - C40) Surrogate: n-Octacosane (40-125%)	EPA 8015B	5F27047	0.50	ND 74 %	0.952	6/27/2005	6/27/2005	
Sample ID: IOF1810-02 (MW4 - Water) Reporting Units: mg/l EFH (C8 - C40) Surrogate: n-Octacosane (40-125%)	EPA 8015B	5F27047	0.50	ND 76 %	0.943	6/27/2005	6/27/2005	
Sample ID: IOF1810-03 (MW2 - Water) Reporting Units: mg/l EFH (C8 - C40) Surrogate: n-Octacosane (40-125%)	EPA 8015B	5F27047	0.50	ND 72 %	0.952	6/27/2005	6/27/2005	
Sample ID: IOF1810-04 (MW1 - Water) Reporting Units: mg/l EFH (C8 - C40) Surrogate: n-Octacosane (40-125%)	EPA 8015B	5F27047	0.50	ND 62 %	0.943	6/27/2005	6/28/2005	
Sample ID: IOF1810-05 (MW3 - Water) Reporting Units: mg/l EFH (C8 - C40) Surrogate: n-Octacosane (40-125%)	EPA 8015B	5F27047	0.50	ND 71 %	0.943	6/27/2005	6/28/2005	

Sampled: 06/23/05

Enecotech Southwest, Inc.-San Diego

6160 Fairmount Avenue, Suite A

San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810 Received: 06/24/05

## **VOLATILE FUEL HYDROCARBONS/BTEX (EPA 5030B/8015M/8021B)**

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1810-01 (MW5 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C6-C12)	EPA 8015B/8021B	5F29040	50	450	1	6/29/2005	6/29/2005	
Benzene	EPA 8015B/8021B	5F29040	0.30	0.51	1	6/29/2005	6/29/2005	
Toluene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/29/2005	
Ethylbenzene	EPA 8015B/8021B	5F29040	0.30	2.4	1	6/29/2005	6/29/2005	
Total Xylenes	EPA 8015B/8021B	5F29040	0.60	1.5	1	6/29/2005	6/29/2005	
Surrogate: 4-BFB (PID) (65-135%)				82 %				
Surrogate: 4-BFB (FID) (65-140%)				118 %				
Sample ID: IOF1810-02 (MW4 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C6-C12)	EPA 8015B/8021B	5G01040	50	ND	1	7/1/2005	7/1/2005	
Benzene	EPA 8015B/8021B	5G01040	0.30	ND	1	7/1/2005	7/1/2005	M2
Toluene	EPA 8015B/8021B	5G01040	0.30	ND	1	7/1/2005	7/1/2005	M2
Ethylbenzene	EPA 8015B/8021B	5G01040	0.30	ND	1	7/1/2005	7/1/2005	M2
Total Xylenes	EPA 8015B/8021B	5G01040	0.60	ND	1	7/1/2005	7/1/2005	M2
Surrogate: 4-BFB (PID) (65-135%)				93 %				
Surrogate: 4-BFB (FID) (65-140%)				86 %				
Sample ID: IOF1810-03 (MW2 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C6-C12)	EPA 8015B/8021B	5F29040	50	ND	1	6/29/2005	6/29/2005	
Benzene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/29/2005	
Toluene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/29/2005	
Ethylbenzene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/29/2005	
Total Xylenes	EPA 8015B/8021B	5F29040	0.60	ND	1	6/29/2005	6/29/2005	
Surrogate: 4-BFB (PID) (65-135%)				98 %				
Surrogate: 4-BFB (FID) (65-140%)				107 %				

Sampled: 06/23/05

Enecotech Southwest, Inc.-San Diego

6160 Fairmount Avenue, Suite A

San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810 Received: 06/24/05

## **VOLATILE FUEL HYDROCARBONS/BTEX (EPA 5030B/8015M/8021B)**

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1810-04 (MW1 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C6-C12)	EPA 8015B/8021B	5F29040	50	64	1	6/29/2005	6/30/2005	
Benzene	EPA 8015B/8021B	5F29040	0.30	0.71	1	6/29/2005	6/30/2005	
Toluene	EPA 8015B/8021B	5F29040	0.30	0.94	1	6/29/2005	6/30/2005	
Ethylbenzene	EPA 8015B/8021B	5F29040	0.30	1.1	1	6/29/2005	6/30/2005	
Total Xylenes	EPA 8015B/8021B	5F29040	0.60	6.5	1	6/29/2005	6/30/2005	
Surrogate: 4-BFB (PID) (65-135%)				95 %				
Surrogate: 4-BFB (FID) (65-140%)				115 %				
Sample ID: IOF1810-05 (MW3 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C6-C12)	EPA 8015B/8021B	5F29040	50	110	1	6/29/2005	6/30/2005	
Benzene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/30/2005	
Toluene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/30/2005	
Ethylbenzene	EPA 8015B/8021B	5F29040	0.30	ND	1	6/29/2005	6/30/2005	
Total Xylenes	EPA 8015B/8021B	5F29040	0.60	0.66	1	6/29/2005	6/30/2005	
Surrogate: 4-BFB (PID) (65-135%)				106 %				
Surrogate: 4-BFB (FID) (65-140%)				114 %				

Enecotech Southwest, Inc.-San Diego

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Report Number: IOF1810

Sampled: 06/23/05 Received: 06/24/05

## **OXYGENATES by GC/MS (EPA 8260B)**

			,	G 1	D11 /	D (	ъ.	ъ.
Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
•	111001100	2	2	1105411	1 40001	2301 11000	111111, 204	Quantities
Sample ID: IOF1810-01 (MW5 - Water)								
Reporting Units: ug/l	EDA 02/0D	5F27016	5.0	NID	1	(127/2005	(127/2005	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Butanol (TBA)	EPA 8260B	5F27016	25	ND	1	6/27/2005	6/27/2005	
Surrogate: Dibromofluoromethane (80-120%)				106 %				
Surrogate: Toluene-d8 (80-120%)				102 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				112 %				
Sample ID: IOF1810-02 (MW4 - Water)								
Reporting Units: ug/l								
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Butanol (TBA)	EPA 8260B	5F27016	25	ND	1	6/27/2005	6/27/2005	
Surrogate: Dibromofluoromethane (80-120%)				105 %				
Surrogate: Toluene-d8 (80-120%)				102 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				105 %				
Sample ID: IOF1810-03 (MW2 - Water)								
Reporting Units: ug/l								
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Butanol (TBA)	EPA 8260B	5F27016	25	ND	1	6/27/2005	6/27/2005	
Surrogate: Dibromofluoromethane (80-120%)			-	103 %				
Surrogate: Toluene-d8 (80-120%)				102 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				106 %				
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Enecotech Southwest, Inc.-San Diego

6160 Fairmount Avenue, Suite A

San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810

Sampled: 06/23/05 Received: 06/24/05

## **OXYGENATES by GC/MS (EPA 8260B)**

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1810-04 (MW1 - Water)								<b>C</b>
Reporting Units: ug/l								
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Butanol (TBA)	EPA 8260B	5F27016	25	ND	1	6/27/2005	6/27/2005	
Surrogate: Dibromofluoromethane (80-120%)				102 %				
Surrogate: Toluene-d8 (80-120%)				101 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				106 %				
Sample ID: IOF1810-05 (MW3 - Water)								
Reporting Units: ug/l								
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F27016	5.0	ND	1	6/27/2005	6/27/2005	
tert-Butanol (TBA)	EPA 8260B	5F27016	25	ND	1	6/27/2005	6/27/2005	
Surrogate: Dibromofluoromethane (80-120%)				107 %				
Surrogate: Toluene-d8 (80-120%)				101 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				109 %				

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San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810

Sampled: 06/23/05 Received: 06/24/05

## METHOD BLANK/QC DATA

## EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/8015 CADHS Modified)

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 5F27047 Extracted: 06/27/05										
Blank Analyzed: 06/27/2005 (5F27047-B	LK1)									
EFH (C8 - C40)	ND	0.50	mg/l							
Surrogate: n-Octacosane	0.175		mg/l	0.200		88	40-125			
LCS Analyzed: 06/28/2005 (5F27047-BS	1)									M-NR1
EFH (C8 - C40)	0.769	0.50	mg/l	1.00		77	40-120			
Surrogate: n-Octacosane	0.173		mg/l	0.200		86	40-125			
LCS Dup Analyzed: 06/28/2005 (5F2704	7-BSD1)									
EFH (C8 - C40)	0.918	0.50	mg/l	1.00		92	40-120	18	25	
Surrogate: n-Octacosane	0.204		mg/l	0.200		102	40-125			

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## METHOD BLANK/QC DATA

## **VOLATILE FUEL HYDROCARBONS/BTEX (EPA 5030B/8015M/8021B)**

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 5F29040 Extracted: 06/29/05										
Blank Analyzed: 06/29/2005 (5F29040	-BLK1)									
Volatile Fuel Hydrocarbons (C6-C12)	ND	50	ug/l							
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	ug/l							
Ethylbenzene	ND	0.30	ug/l							
Total Xylenes	ND	0.60	ug/l							
Surrogate: 4-BFB (PID)	9.24		ug/l	10.0		92	65-135			
Surrogate: 4-BFB (FID)	10.2		ug/l	10.0		102	65-140			
LCS Analyzed: 06/29/2005 (5F29040-1	BS1)									
Volatile Fuel Hydrocarbons (C6-C12)	858	50	ug/l	800		107	65-140			
Surrogate: 4-BFB (FID)	39.1		ug/l	30.0		130	65-140			
LCS Analyzed: 06/29/2005 (5F29040-	BS2)									
Benzene	16.3	0.30	ug/l	20.0		82	75-120			
Toluene	17.8	0.30	ug/l	20.0		89	80-120			
Ethylbenzene	17.6	0.30	ug/l	20.0		88	85-120			
Total Xylenes	52.2	0.60	ug/l	60.0		87	80-120			
Surrogate: 4-BFB (PID)	9.80		ug/l	10.0		98	65-135			
Matrix Spike Analyzed: 06/29/2005 (5	F29040-MS1)				Source: I	OF1779-0	3			
Volatile Fuel Hydrocarbons (C6-C12)	303	50	ug/l	220	70	106	60-145			
Benzene	19.0	0.30	ug/l	20.0	ND	95	60-130			
Toluene	20.3	0.30	ug/l	20.0	ND	102	70-125			
Ethylbenzene	20.7	0.30	ug/l	20.0	ND	104	75-130			
Total Xylenes	61.8	0.60	ug/l	60.0	ND	103	70-125			
Surrogate: 4-BFB (PID)	10.2		ug/l	10.0		102	65-135			
Surrogate: 4-BFB (FID)	12.8		ug/l	10.0		128	65-140			

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3100029

Report Number: IOF1810

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Data

## METHOD BLANK/QC DATA

## **VOLATILE FUEL HYDROCARBONS/BTEX (EPA 5030B/8015M/8021B)**

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		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 5F29040 Extracted: 06/29/05										
M-4 6 2 Door Assolved 4-07/20/20	005 (5E20040 M	CD1)			C I	OE1770 0	2			
Matrix Spike Dup Analyzed: 06/29/20	`		/1	220		OF1779-0			20	
Volatile Fuel Hydrocarbons (C6-C12)	307 19.3	50	ug/l	220	70 ND	108	60-145 60-130	1	20 20	
Benzene Toluene		0.30	ug/l	20.0		96 102		2		
	20.6	0.30	ug/l	20.0	ND	103	70-125	1	20	
Ethylbenzene	20.7	0.30	ug/l	20.0	ND	104	75-130	0	20	
Total Xylenes	61.2	0.60	ug/l	60.0	ND	102	70-125	1	20	
Surrogate: 4-BFB (PID)	9.98		ug/l	10.0		100	65-135			
Surrogate: 4-BFB (FID)	12.7		ug/l	10.0		127	65-140			
Batch: 5G01040 Extracted: 07/01/05										
Blank Analyzed: 07/01/2005 (5G0104	0-BLK1)									
Volatile Fuel Hydrocarbons (C6-C12)	ND	50	ug/l							
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	ug/l							
Ethylbenzene	ND	0.30	ug/l							
Total Xylenes	ND	0.60	ug/l							
Surrogate: 4-BFB (PID)	9.35		ug/l	10.0		94	65-135			
Surrogate: 4-BFB (FID)	8.32		ug/l	10.0		83	65-140			
LCS Analyzed: 07/01/2005 (5G01040-	-BS1)									
Volatile Fuel Hydrocarbons (C6-C12)	777	50	ug/l	800		97	65-140			
Surrogate: 4-BFB (FID)	31.0		ug/l	30.0		103	65-140			
LCS Analyzed: 07/01/2005 (5G01040-	-BS2)									
Benzene	18.7	0.30	ug/l	20.0		94	75-120			
Toluene	18.9	0.30	ug/l	20.0		94	80-120			
Ethylbenzene	20.2	0.30	ug/l	20.0		101	85-120			
Total Xylenes	56.4	0.60	ug/l	60.0		94	80-120			
Surrogate: 4-BFB (PID)	8.66		ug/l	10.0		87	65-135			

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Sampled: 06/23/05 Received: 06/24/05

## METHOD BLANK/QC DATA

## **VOLATILE FUEL HYDROCARBONS/BTEX (EPA 5030B/8015M/8021B)**

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 5G01040 Extracted: 07/01/05										
Matrix Spike Analyzed: 07/01/2005 (5G	01040-MS1)				Source: I	OF1810-0	2			
Volatile Fuel Hydrocarbons (C6-C12)	163	50	ug/l	220	ND	74	60-145			
Benzene	12.7	0.30	ug/l	20.0	ND	64	60-130			
Toluene	12.5	0.30	ug/l	20.0	ND	62	70-125			M2
Ethylbenzene	13.6	0.30	ug/l	20.0	ND	68	75-130			M2
Total Xylenes	37.3	0.60	ug/l	60.0	ND	62	70-125			M2
Surrogate: 4-BFB (PID)	8.53		ug/l	10.0		85	65-135			
Surrogate: 4-BFB (FID)	9.28		ug/l	10.0		93	65-140			
Matrix Spike Dup Analyzed: 07/01/2005 (5G01040-MSD1)			Source: IOF1810-02							
Volatile Fuel Hydrocarbons (C6-C12)	193	50	ug/l	220	ND	88	60-145	17	20	
Benzene	17.5	0.30	ug/l	20.0	ND	88	60-130	32	20	R
Toluene	17.3	0.30	ug/l	20.0	ND	86	70-125	32	20	R
Ethylbenzene	18.7	0.30	ug/l	20.0	ND	94	75-130	32	20	R
Total Xylenes	51.3	0.60	ug/l	60.0	ND	86	70-125	32	20	R
Surrogate: 4-BFB (PID)	8.93		ug/l	10.0		89	65-135			
Surrogate: 4-BFB (FID)	8.43		ug/l	10.0		84	65-140			

Sampled: 06/23/05

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3100029

Report Number: IOF1810 Received: 06/24/05

## METHOD BLANK/QC DATA

## **OXYGENATES by GC/MS (EPA 8260B)**

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 5F27016 Extracted: 06/27/05										
DI 1 1 1 1 0 (25/2005 (5F2501 ( )	T T74\									
Blank Analyzed: 06/27/2005 (5F27016-B	*	<b>7</b> 0								
Methyl-tert-butyl Ether (MTBE)	ND	5.0	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	26.8		ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	25.5		ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	27.0		ug/l	25.0		108	80-120			
LCS Analyzed: 06/27/2005 (5F27016-BS	1)									
Methyl-tert-butyl Ether (MTBE)	22.8	5.0	ug/l	25.0		91	55-140			
Di-isopropyl Ether (DIPE)	22.9	5.0	ug/l	25.0		92	60-135			
Ethyl tert-Butyl Ether (ETBE)	20.4	5.0	ug/l	25.0		82	60-135			
tert-Amyl Methyl Ether (TAME)	21.4	5.0	ug/l	25.0		86	60-135			
tert-Butanol (TBA)	136	25	ug/l	125		109	65-135			
Surrogate: Dibromofluoromethane	27.0		ug/l	25.0		108	80-120			
Surrogate: Toluene-d8	25.5		ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	26.8		ug/l	25.0		107	80-120			
Matrix Spike Analyzed: 06/27/2005 (5F27016-MS1)					Source: I	OF1810-0	1			
Methyl-tert-butyl Ether (MTBE)	28.9	5.0	ug/l	25.0	ND	116	50-150			
Di-isopropyl Ether (DIPE)	24.7	5.0	ug/l	25.0	ND	99	60-140			
Ethyl tert-Butyl Ether (ETBE)	22.7	5.0	ug/l	25.0	ND	91	55-135			
tert-Amyl Methyl Ether (TAME)	25.7	5.0	ug/l	25.0	ND	103	55-140			
tert-Butanol (TBA)	125	25	ug/l	125	ND	100	60-145			
Surrogate: Dibromofluoromethane	27.0		ug/l	25.0		108	80-120			
Surrogate: Toluene-d8	25.9		ug/l	25.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	26.8		ug/l	25.0		107	80-120			

Sampled: 06/23/05

Enecotech Southwest, Inc.-San Diego 6160 Fairmount Avenue, Suite A

San Diego, CA 92120 Attention: Casey Poldino Project ID: Gem Properties/Lytton Street

3100029

Report Number: IOF1810 Received: 06/24/05

## METHOD BLANK/QC DATA

## **OXYGENATES by GC/MS (EPA 8260B)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F27016 Extracted: 06/27/05										
Matrix Spike Dup Analyzed: 06/27/2005	(5F27016-M	SD1)			Source: I	OF1810-0	1			
Methyl-tert-butyl Ether (MTBE)	23.8	5.0	ug/l	25.0	ND	95	50-150	19	25	
Di-isopropyl Ether (DIPE)	23.2	5.0	ug/l	25.0	ND	93	60-140	6	25	
Ethyl tert-Butyl Ether (ETBE)	20.2	5.0	ug/l	25.0	ND	81	55-135	12	25	
tert-Amyl Methyl Ether (TAME)	22.1	5.0	ug/l	25.0	ND	88	55-140	15	30	
tert-Butanol (TBA)	135	25	ug/l	125	ND	108	60-145	8	25	
Surrogate: Dibromofluoromethane	26.0		ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	25.8		ug/l	25.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	26.5		ug/l	25.0		106	80-120			



Sampled: 06/23/05

Enecotech Southwest, Inc.-San Diego

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## DATA QUALIFIERS AND DEFINITIONS

M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

M-NR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike

Duplicate.

R The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries,

however, were within acceptance limits.

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

**RPD** Relative Percent Difference

## ADDITIONAL COMMENTS

#### For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD. The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

#### For Volatile Fuel Hydrocarbons (C6-C12):

Volatile Fuel Hydrocarbons (C6-C12) are quantitated against a gasoline standard.

#### For Extractable Fuel Hydrocarbons (EFH, DRO, ORO):

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.



Enecotech Southwest, Inc.-San Diego

6160 Fairmount Avenue, Suite A San Diego, CA 92120

Attention: Casey Poldino

Project ID: Gem Properties/Lytton Street

3100029

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Sampled: 06/23/05

Received: 06/24/05

## **Certification Summary**

## Del Mar Analytical, Irvine

Method	Matrix	Nelac	California
EPA 8015B/8021B	Water	X	X
EPA 8015B	Water	X	X
EPA 8260B	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at www.dmalabs.com.

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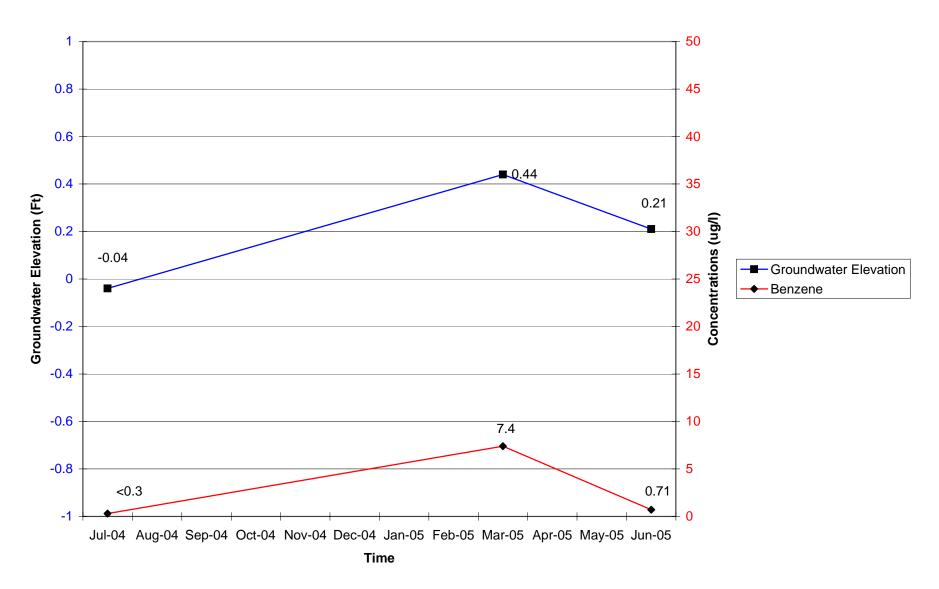
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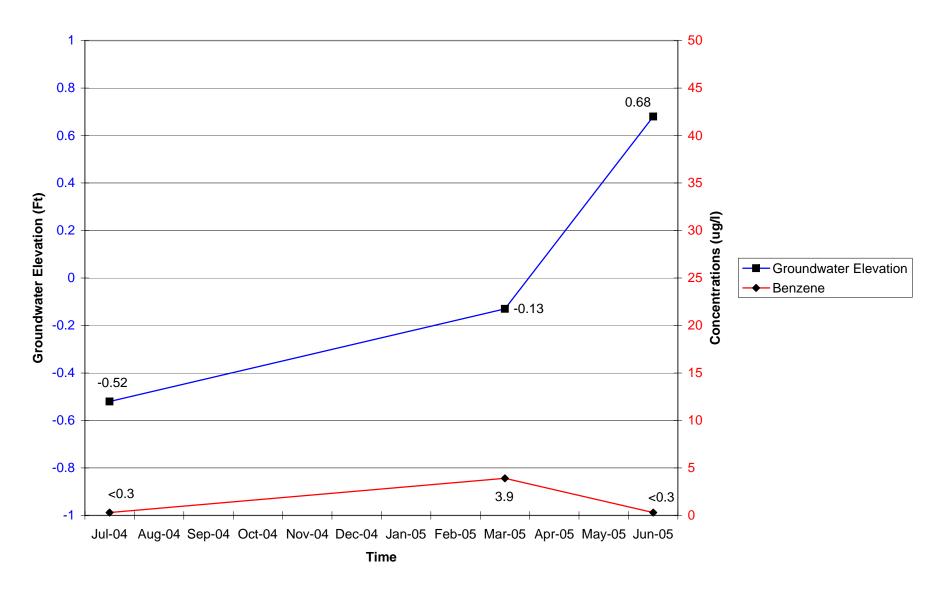
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| Date/Time | Received by: (Signature) B vics (Ha), 1 ambor 1. ko COC CA# 7 day truchand EnecoTech contact: /Ship To: Remarks/Bottle No. Split Samples: Remarks Date/Time Mague 1 CONTAIN-ERS Received for Laboratory by: (Signature) Received by: (Signature) 6/24/5/12:15 (Olimpia) 3100029 | GEM Properties, Lyther ST. STATION LOCATION Date/Time PROJ. NO. | PROJECT NAME 6.23057.55 623.05 11:00 6 23.05 2:00 6.23.05 9:55 MW S 6.23.05 4:55 Relinquished by: (Signature) Relinquished by: (Signature) SAMPLERS: (Signature) 5 MW M 2 -7W STAT. NO.

☐ Declined

# APPENDIX D

Graphs





Page 1

